

REMARKS/ARGUMENTS

Responsive to the Office Action mailed September 29, 2008:

- A. The Office Action rejected claim 12 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

Please see [0027] and [0028] and originally-filed Fig. 3. There are several curves $Z=f_D$ (S) which are predetermined before the method is applied. Each of these curves is measured at a time t and for a finger D . The time t does not play a direct role in the drawing of the graph. The time t is a time point which is used to define the moment when the graph has been drawn. The graph represents the variation of the impedance in relation to the surface S at the moment t when the measurement has been done. Thus, at another moment t , the same finger D can give another graph. This phenomenon is due to the variations of the environment or of the finger. But under fixed conditions, the same finger D will always give the same graph at whatever moment t at which the measurement takes place. A statistical law is established between the surface S and the impedance Z . The moment t does not intervene directly in the law. The invention described and claimed is the following:

- a first impedance Z is measured for the first surface S ;
- from these data, the corresponding curve (among several predetermined curves) is chosen (i.e., the curve which contains the first point (first S , first Z));
- a second impedance Z is measured for the second surface S ;
- the method verifies that this second point belongs to the same curve.

- B. The Office Action rejected claim 12 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 has been amended and now satisfies 35 U.S.C. 112, second paragraph.

- C. The Office Action rejected claims 12, 17, 19, 20 and 21 under 35 U.S.C., second paragraph, as being indefinite for failing to particularly point out

and distinctly claim the subject matter which applicant regards as the invention.

Claims 12 and 17 as amended herein satisfy the rejection.

As to claim 18, the word "distance" is distinct. There is no requirement for Applicant to specifically claim the amount of distance, contrary to the Examiner's statement.

D. The Office Action rejected claims 12-16 under 35 U.S.C. 103(a) as being unpatentable over Kallo in combination with Setlak.

The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.¹ If the Examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of non-obviousness.²

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.³

Applicant respectfully traverses the § 103 rejection because the office action has not established a *prima facie* case of obviousness.

1. The cited prior art does not teach or suggest all the claim limitations.

As to claim 12, the cited references do not disclose:

- (a) making a first measurement of impedance of the finger between two first electrodes with a first predetermined surface area and determining one curve among several curves, each of said several curves satisfying a law of variation of impedance Z measured by the electrodes as a function of the surface area (S) of

¹MPEP Sec. 2142.

² Id.

³Id. (emphasis supplied)

the electrodes covered by the fingerprint of a finger D at a time t, that is, $Z=f_D(S)$, said one curve being determined by selecting the curve containing the point with coordinates (first predetermined surface area, measured impedance);

- (b) making a second measurement of impedance between two second electrodes with a second predetermined surface area different from said first predetermined surface area, and
- (c) checking that the point defined by the second predetermined surface area and the second impedance measurement values belongs to an area of tolerance situated around said one curve.

The Examiner does not state that Kallo discloses the claimed elements.

Setlak discloses that the sensors can have different form and size but for a given embodiment, all the sensors are the same. The Examiner does not state that Setlak discloses that for a given embodiment there are different size sensors for the two measurements. The Examiner also does not state that Setlak discloses a curve satisfying the claimed law of variation of impedance Z as a function of the surface area of the electrodes covered by the fingerprint of a finger D at a time t . In short, the Examiner does not state that Setlak satisfies the claimed law of variation of the impedance.

Claim 12 is therefore allowable.

Claims 13 and 14 have been canceled.

Claims 15 and 16 contain additional elements and/or limitations beyond allowable claim 12 and are also allowable.

- E. The Office Action rejected claims 17, 18, and 22 under 35 USC 103(a) as being unpatentable over Kallo in combination with Setlak (US 6,067,368) and Setlak (US 5,963,679).

Applicant respectfully traverses the § 103 rejection because the office action has not established a *prima facie* case of obviousness.

1. The cited prior art does not teach or suggest all the claim limitations.

As to claim 17, the cited references do not disclose:

- (a) at least four electrodes, wherein at least two of the said at least four electrodes have smaller surfaces than the other two of the said four electrodes with larger surfaces;
- (b) means for measuring impedances at least between on the one hand, two electrodes with smaller surfaces and on the other hand, two electrodes with larger surfaces,
- (c) means for determining one curve among several curves, each of said several curves satisfies a law of variation of the impedance Z measured by said two electrodes with smaller surfaces or by said electrodes with larger surfaces, as a function of the surface area (S) of the electrodes covered by the fingerprint of a finger D at a time t , that is, $Z=f_D(S)$, said one curve being determined by selecting the curve containing the point with the coordinates (first predetermined surface area, measured impedance); and
- (d) means for checking that the point defined by the other surface area and the other impedance measurement values belongs to an area of tolerance situated around said one curve.

The Examiner does not state that Kallo discloses the claimed elements.

Setlak '679 discloses that the sensors can have different form and size but for a given embodiment, all the sensors are the same. The Examiner does not state that Setlak '679 discloses that for a given embodiment there are different size sensors for the two measurements. The Examiner also does not state that Setlak '679 discloses a curve satisfying the claimed law of variation of impedance Z as a function of the surface area of the electrodes covered by the fingerprint of a finger D at a time, t . In short, the Examiner does not state that Setlak '679 satisfies the claimed law of variation of the impedance.

The Examiner states that Setlak '368 discloses electrodes with larger and smaller surface areas (referencing Fig. 3, numeral 30a or Fig. 8, numeral 130). This is incorrect. The electrodes 30a of Fig. 3 all appear to be the same size. Reference numeral 131 of Fig. 8 indicates nothing about electrode size.

The Examiner also does not state that Setlak '368 discloses the claimed law of variation of impedance.

Claim 17 is allowable for at least the reasons discussed above in regard to the rejection of claim 12.

Claims 18 and 22 contain additional elements and/or limitations beyond allowable claim 17 and are also allowable.

- F. The Office Action rejected claims 19-21 under 35 U.S.C. 103(a) as being unpatentable over Hesnes (US 6,778,686) in combination with Setlak (US 5,943,441) and further in view of Setlak (US 5,963,679).

Regarding claims 19-21, Applicant respectfully differs from the Examiner's citations to the references as showing:

- (a) a first set of four single-piece electrodes with identical large surfaces and a second set of two electrodes in the form of intersecting combs with identical surfaces less than the identical large surfaces;
- (b) means for measuring the impedances between electrodes selected from the group consisting of: the two electrodes with smaller surfaces; two of the electrodes with larger surfaces; and one of the electrodes with smaller surfaces and one of the electrodes with larger surfaces; and
- (c) means of checking that the impedances measured by the measuring means follow a predetermined law of variation of the impedance as a function of the surface area of the electrodes used for the measurement.

Applicant cannot find specific disclosure of the claimed elements at the citations of the Examiner.

Applicant reminds the Examiner that two references, even if combinable, must nevertheless result in a combination that discloses all claimed elements.

In *KSR Int'l Co. v. Teleflex Inc. et.al.*⁴, the Court re-affirmed that:

Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.⁵

⁴ *KSR Int'l v. Teleflex, Inc.*, 127 S.Ct. 1727. 82 USPQ2d 1385 (2007)

Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.⁶

For the above reasons, Applicant respectfully requests the allowance of all claims and the issuance of a Notice of Allowance.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 02-3732.

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Respectfully submitted,

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⁵ Id.

⁶ Id.